SIMTEK6373

IN THE UNITED STATES PATENT OFFICE

In re Application of
Tadashi Takano et al

App. No.: 10/064363
Filed: 7/7/2002
Conf. No.: 2097
Title: ARMATURE FOR REVOLVING-FIELD ELECTRIC MACHINE
Examiner: G. Perez
Art Unit: 2834

I hereby certify that this correspondence and all marked attachments are being deposited with the United States Patent Office via fax to (571) 273-8300 on:
January 21, 2006
Ernest A. Beutler
Reg. No. 19901

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

APPELLANT'S BRIEF

REAL PARTY IN INTEREST

In addition to the appellant, the real party in interest is his assignee, Kabushiki Kaisha Moric, a Japanese company.

RELATED APPEALS AND INTERFERENCES

There are no other appeals or interferences that would have a bearing on or be affected by the decision in this appeal however this is the second Appeal in this case the Board's Decision in the first appeal is dated May 31, 2005.

STATUS OF CLAIMS

Claims 1 and 4-6 remain in this application and all are before the Board on appeal.

STATUS OF AMENDMENTS

No amendment was proposed after the Final Rejection and the claims before the Board are in the form as Finally Rejected.

SUMMARY OF CLAIMED SUBJECT MATTER

Independent claim 1, the sole independent claim before the Board recites the following elements identified in the drawings by the noted reference numerals and described in the noted paragraphs of the specification. The general subject matter relates to an armature, indicated in the drawings generally by the reference numeral 47 and first described in Paragraph 0033. This armature is for a rotating machine, indicated in the drawings generally by the reference numeral 31, and first described in Paragraph 0029. The armature 47 has a circular core of a magnetic material, indicated in the drawings by the reference numeral 48, as first described in Paragraph 0033. A plurality of magnetic pole teeth, indicated in the drawings by the reference numeral 49, as first described also in Paragraph 0033. These pole teeth each extend radially from the circular core and terminating at terminal ends, indicated in the drawings by the reference numerals 52 as described in Paragraph 0033, that are spaced from the circular core and an define an enlargement as seen in FIGS. 2 and 4 to define slots, indicated by the reference numeral 53 and also described first in this Paragraph 0033. As also seen in FIGS, 2 and 4, each of the slots has a mouth formed between adjacent enlargements.

The armature 47 is surrounded by an insulating bobbin, indicated in the drawings by the reference numeral 57, as first described in Paragraph 0035. This bobbin is comprised of two mating sections indicated in the drawings by the reference numerals 57a and 57b as first described in Paragraph 35 as described in Paragraph 0036. These have a circular portion, indicated by the reference numeral 58, lying on one side of the armature circular core, as first described in Paragraph 0037, and leg portions, indicated in the drawings by the reference numeral 59 that extend for the length of the pole teeth at least on the sides of the slots.

The insulator extending portions, indicated in the drawings by the reference numeral 61 as first described in Paragraph 0039 that extend at least along the side of the enlargements facing the circular core and which define the aforementioned fixed and open clearance slot 53 therebetween for protecting windings formed by a winding needle, shown in FIG. 14, indicated by the reference numeral 72 and described first in Paragraph 0048, from damage by the winding needle and for forming a fixed clearance opening to receive at least a portion of the winding needle

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

There are two somewhat inconsistent grounds of rejection to be considered by the Board. The first is whether the appealed claims are anticipated under 35 USC 102(b) by US Patent 5,698,923 (Scherzinger et al).

The other ground of rejection is whether the claims are obvious under 35 USC 103(a) over the combination of Scherzinger et al in view of US Patent 3,276,275 (Ebbert)

APPELLANT'S ARGUMENTS

Before going into detail as to the merits of the case, appellants' attorney would like the record to show how the Scherzinger et al reference came to be cited to the Board in the earlier appeal in this case and to clarify his position as to the relevance of this citation.

During the prosecution leading up to the first final rejection of July 30, 2003 and after that appellants' attorney was unaware of the Scherzinger et al reference and first became aware of it in late November 2004 and immediately filed an IDS calling it to the Examiner's attention believing that it was in many regards more pertinent than the art the Examiner was relying upon. However the Examiner did not reopen prosecution and the undersigned was left with no alternative but to call it to the Board's attention during the appeal hearing on May 5. 2005. He also admitted that it overcame certain defects or the art relied upon at that time. The reference relied upon by the Examiner showed a resilient member that closed the gap between the pole teeth but would flex to pass the wire during winding. This could cause the insulation to be displaced and wear on the winding needle.

The Scherzinger et al reference showed rigid bobbin members that more closely resembled appellants' structure, but not a full anticipation as implied by the undersigned's comments to the Board. Therefore the following argument will point out those differences and emphasize the patentability of the claimed structure.

Claim 1 is not anticipated by Scherzinger et al

As clearly seen in Scherzinger et al's FIGS. 2 and 3 the insulating assembly is comprised of a plurality of elements pairs of which embrace each pole tooth. This is a very cumbersome and labor intensive solution and is not in fact directed to protecting the wire or winding needle during winding. However the question is whether the claim language reads on the reference, as that is the test for a rejection under 35 USC 102(a). Thus claim 1 will be set out below marked up to show why the reference does not anticipate it.

CLAIM 1 COMPARED

1. An armature for a rotating machine having a circular core of a magnetic material and a plurality of magnetic pole teeth extending radially from said circular core and terminating at terminal ends spaced from said circular core, each of said magnetic pole teeth defining a core and an enlargement formed at the terminal end of said core, to define slots formed between adjacent magnetic pole teeth, each of said slots having a mouth formed between adjacent enlargements, an insulating bobbin having a circular portion lying on one side of said circular core and leg portions that extend for the length of said pole teeth at least on the sides of said slots and insulator extending portions extending at least along the side of said enlargements facing said circular core and defining a fixed and open clearance slot therebetween for protecting windings formed by a winding needle from damage by the winding needle and for forming a fixed clearance opening to receive at least a portion of the winding needle.

Thus it should be apparent that, first the individual insulator pieces of Scherzinger et al have no part corresponding to the area identified by the reference numeral 38 in appellants' structure. Also each insulator segment in Scherzinger et al only extends on one side of the gap between the enlarged outer ends of the pole teeth. Finally there is no indication whatsoever how the teeth are wound in the reference, let alone by a winding needle between facing sides of the same insulator piece.

The Scherzinger et al, Ebbert Combination is not Obvious

First it should be noted that Ebbert is directed to a winding apparatus and is not shown in combination with an insulated bobbin. Thus why would one skilled in the art look to this reference for some teaching of protecting a winding needle that passes between pole teeth?

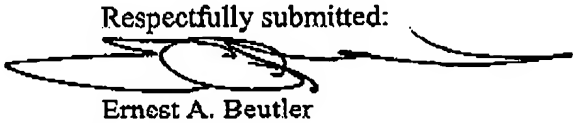
It should be also noted that claim 6 is directed to the embodiments of FIGS. 19 and 20 where the facing extensions form a gap to protect the wire from contact with the winding needle. The references alone or in combination do not teach this.

Conclusion

In view of the foregoing it is most respectfully submitted that the Examiner has failed to meet his burden of proof and each of his rejections should be reversed.

Since a Brief fee has already been paid in this case, it is assumed that no further fee is required, If this is incorrect, please call the undersigned.

Respectfully submitted:



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APPENDIX
CLEAN COPY OF CLAIMS ON APPEAL

1. An armature for a rotating machine having a circular core of a magnetic material and a plurality of magnetic pole teeth extending radially from said circular core and terminating at terminal ends spaced from said circular core, each of said magnetic pole teeth defining a core and an enlargement formed at the terminal end of said core, to define slots formed between adjacent magnetic pole teeth, each of said slots having a mouth formed between adjacent enlargements, an insulating bobbin having a circular portion lying on one side of said circular core and leg portions that extend for the length of said pole teeth at least on the sides of said slots and insulator extending portions extending at least along the side of said enlargements facing said circular core and defining a fixed and open clearance slot therebetween for protecting windings formed by a winding needle from damage by the winding needle and for forming a fixed clearance opening to receive at least a portion of the winding needle.

4. An armature for a rotating machine as set forth in claim 1, wherein the insulator extending portions have a greater thickness than the insulating bobbin leg portions.

6. An armature for a rotating machine as set forth in claim 1 wherein the open clearance slot is formed between portions of the insulator portions that define an opening smaller than the diameter of the received winding nozzle tip.

COPIES OF EVIDENCE SUBMITTED AND RELIED UPON BY APPELLANT

None

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COPIES OF DECISIONS IN RELATED APPEALS AND INTERFERENCES

A copy of the Board's earlier decision in this case is attached.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte TADASHI TAKANO and SUSUMU ANDO

Appeal No. 2005-0478
Application No. 10/064,363

HEARD: May 5, 2005

Before HAIRSTON, LEVY, and MACDONALD, ***Administrative Patent Judges***.

MACDONALD, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1 and 4-6.

Invention

Appellants' invention relates to an armature for a rotating machine having a circular core of a magnetic material and a plurality of magnetic pole teeth extending radially from said circular core and terminating at terminal ends spaced from said circular core. Each of the magnetic pole teeth defining a core with an enlargement formed at the terminal end of the core. This defines slots formed between adjacent magnetic pole teeth. Each of the slots has a mouth formed between adjacent enlargements. An insulator extends at least along the

side of the enlargements facing the circular core for protecting windings formed by a winding needle from damage by the winding needle. Appellants' specification at page 2, paragraph [0005].

Claim 1 is representative of the claimed invention and is reproduced as follows:

1. An armature for a rotating machine having a circular core of a magnetic material and a plurality of magnetic pole teeth extending radially from said circular core and terminating at terminal ends spaced from said circular core, each of said magnetic pole teeth defining a core and an enlargement formed at the terminal end of said core, to define slots formed between adjacent magnetic pole teeth, each of said slots having a mouth formed between adjacent enlargements, an insulating bobbin having a circular portion lying on one side of said circular core and leg portions that extend for the length of said pole teeth at least on the sides of said slots and insulator portions extending at least along the side of said enlargements facing said circular core for protecting windings formed by a winding needle from damage by the winding needle.

References

The reference relied on by the Examiner is as follows:

Uchida et al. (Uchida)	5,763,978	Jun. 9, 1998

The reference relied on by this Board is as follows:

Scherzinger et al. (Scherzinger)[1]	5,698,923	Dec. 16, 1997

Rejections At Issue

Claims 1 and 4-6 stand rejected under 35 U.S.C. § 103 as being obvious over Uchida.

[1] Copy supplied by Appellants as part of the Information Disclosure Statement filed on December 8, 2004.

Throughout our opinion, we make references to the Appellants' brief, and to the Examiner's Answer for the respective details thereof.[2]

OPINION

With full consideration being given to the subject matter on appeal, the Examiner's rejections and the arguments of the Appellants and the Examiner, for the reasons stated ***infra***, we affirm the Examiner's rejection of claims 1 and 5-6 under 35 U.S.C. § 103, and we reverse the Examiner's rejection of claim 4 under 35 U.S.C. § 103.

We also use our authority under 37 CFR § 41.50(b) to enter a new ground of rejection of claims 1 and 4. The basis for this is set forth in detail below.

Only those arguments actually made by Appellants have been considered in this decision. Arguments that Appellants could have made but chose not to make in the brief have not been considered. We deem such arguments to be waived by Appellants [see 37 CFR § 41.37(c)(1)(vii) effective September 13, 2004 replacing 37 CFR § 1.192(a)].

Appellants have indicated that for purposes of this appeal, the claims stand or fall separately. See page 2 of the brief. Furthermore, Appellants argue each group of claims separately and explain why the claims of each group are believed to be separately patentable.

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[2] Appellants filed an appeal brief on December 9, 2003. The Examiner mailed an Examiner's Answer on April 29, 2004

*I. **Whether the Rejection of Claims 1 and 5-6 Under 35 U.S.C. § 103 is proper?***

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would have suggested to one of ordinary skill in the art the invention as set forth in claims 1 and 5-6. Accordingly, we affirm.

In rejecting claims under 35 U.S.C. § 103, the Examiner bears the initial burden of establishing a ***prima facie*** case of obviousness. ***In re Oetiker***, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992). ***See also In re Piasecki***, 745 F.2d 1468, 1472, 223 USPQ 785, 788 (Fed. Cir. 1984). The Examiner can satisfy this burden by showing that some objective teaching in the prior art or knowledge generally available to one of ordinary skill in the art suggests the claimed subject matter. ***In re Fine***, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Only if this initial burden is met does the burden of coming forward with evidence or argument shift to the Appellants. ***Oetiker***, 977 F.2d at 1445, 24 USPQ2d at 1444. ***See also Piasecki***, 745 F.2d at 1472, 223 USPQ at 788.

An obviousness analysis commences with a review and consideration of all the pertinent evidence and arguments. "In reviewing the [E]xaminer's decision on appeal, the Board must necessarily weigh all of the evidence and argument." ***Oetiker***, 977 F.2d at 1445, 24 USPQ2d at 1444. "[T]he Board must not only assure that the requisite findings are made, based on evidence of

record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion." ***In re Lee***, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002).

With respect to independent claim 1, Appellants argue at page 3 of the brief, that the claim distinguishes over the Uchida patent as the claimed "insulator portions extending at least along the side of said enlargements" are "for protecting windings . . . from damage by the winding needle." We find this argument unpersuasive.

We find that "for protecting windings . . . " is an intended use of the Appellants' claimed "insulator portions extending at least along the side of said enlargements." A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See ***In re Casey***, 152 USPQ 235 (CCPA 1967) and ***In re Otto***, 136 USPQ 458, 459 (CCPA 1963). In the situation before us, figure 4(b) of Uchida shows that the opening for the nozzle (42) of the winding machine is between insulator portions (32) extending at least along enlargement (12). The insulator portions are inclined into slot (20). We find that as a nozzle (42) is inserted into slot (20) the insulator portion (32) would bend into the slot and protect at least some of the windings from damage by the nozzle (42).

In view of the above discussion, it is our view, that Uchida teaches all the features of claim 1. A disclosure that anticipates under 35 U.S.C. § 102 also renders the claim unpatentable under 35 U.S.C. § 103, for "anticipation is the epitome of obviousness." ***Jones V. Hardy***, 727 F.2d 1524, 1529, 220 USPQ 1021, 1025 (Fed. Cir. 1984). ***See also In re Francalossi***, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982), ***In re Pearson***, 494 F.2d 1399, 1402, 181 USPQ 641, 644 (CCPA 1974).[3]

As to claim 5, Appellants argue, "Fig. 2 . . . fails to show any nozzle tip." We find this argument unpersuasive as Uchida's teaches a nozzle (item 42) at column 6, line 43.

As to claim 6, Appellants argue that Uchida fails to show an opening smaller than the nozzle tip. We find this argument unpersuasive as the opening shown in figure 2 of Uchida is deformed by the nozzle and is thus smaller.

Therefore, we will sustain the Examiner's rejection under 35 U.S.C. § 103 of claims 1 and 5-6.

II. Whether the Rejection of Claim 4 Under 35 U.S.C. § 103 is proper?

It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the invention as set forth in claim 4. Accordingly, we reverse.

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[3] The Board may rely on less than all of the references applied by the Examiner in an obviousness rationale without designating it as a new ground of rejection. ***In re Bush***, 296 F.2d

With respect to dependent claim 4, Appellants argue at page 2 of the brief that figure 2 of Uchida fails to teach that the "insulator portions have a greater thickness than the insulating bobbin leg portions." We agree. We have reviewed the Uchida reference and find that it does not recite the "greater thickness" as argued in the rejection at page 5 of the answer. Further, we find that the Examiner's reliance on figure 4b at page 7 of the answer is misplaced as the accompanying detailed description gives no hint as to what thickness is being represented in figure 4b.

Therefore, we will not sustain the Examiner's rejection under 35 U.S.C. § 103.

III. Rejection of Claims 1 and 4 Under 37 CFR § 41.50(b).

We make the following new grounds of rejection using our authority under 37 CFR § 41.50(b).

Claims 1 and 4 are rejected under 35 U.S.C. § 102 as being clearly anticipated by figures 2 and 3 of Scherzinger.

Appellants have admitted that Scherzinger anticipates at least claim 1.[4] We have reviewed Scherzinger and find that it also teaches the subject matter of claim 4 as the insulator portions (36) in figure 2 have a thickness greater than the bobbin leg portions (40).

491, 496, 131 USPQ 263, 266-67 (CCPA 1961); *In re Boyer*, 363 F.2d 455, 458 n.2 150 USPQ 441, 444 n.2 (CCPA 1966).

[4] Appellants' representative admitted at the Oral Hearing held at the Board of Patent Appeals and Interferences on May 5, 2005, that the Scherzinger patent anticipates at least some of the claims.

Conclusion

In view of the foregoing discussion, we have sustained the rejection under 35 U.S.C. § 103 of claims 1 and 5-6; we have not sustained the rejection under 35 U.S.C. § 103 of claim 4; and we have entered a new ground of rejection against claims 1 and 4 under 37 CFR § 41.50(b).

As indicated ***supra***, this decision contains a new ground of rejection pursuant to 37 CFR § 41.50(b) (effective September 13, 2004, by final rule notice, 69 Fed. Reg 49960, 50008 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21, 61 (September 7, 2004)). 37 CFR § 41.50(b) provides that, "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 CFR § 41.50(b) also provides that the Appellant, **WITHIN TWO MONTHS FROM THE DATE OF THE DECISION**, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of proceedings (37 CFR § 1.197 (b) (amended effective September 13, 2004)) as to the rejected claims:

> (1) Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the examiner, in which event the proceeding will be remanded to the examiner. . .
>
> (2) Request that the proceeding be reheard under 37 CFR § 41.52 by the Board upon the same record. . .

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a)(1)(iv).

AFFIRMED-IN-PART; 37 CFR § 41.50(b)

KENNETH W. HAIRSTON
Administrative Patent Judge)
)
STUART S. LEVY) BOARD OF PATENT
Administrative Patent Judge) APPEALS AND
) INTERFERENCES
ALLEN R. MACDONALD)
Administrative Patent Judge)

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